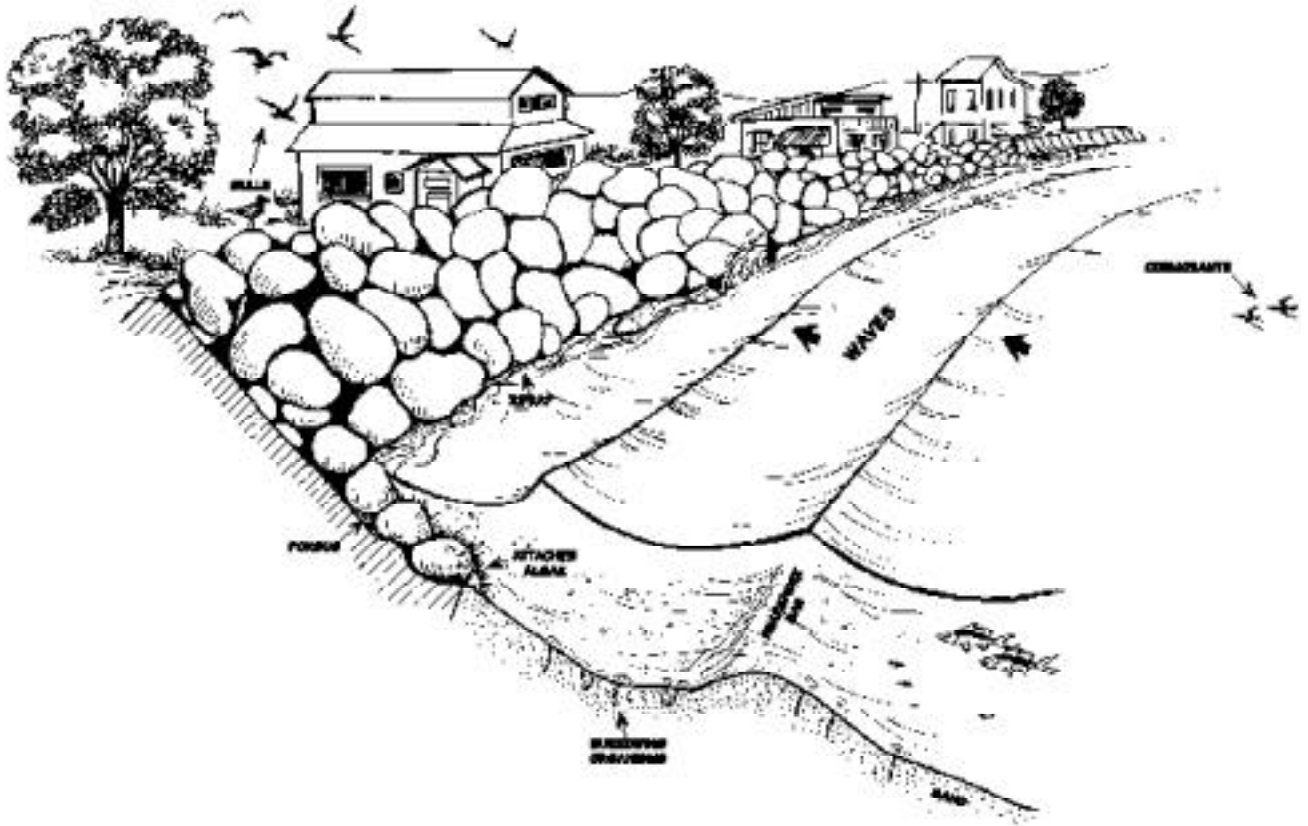
Riprap



Riprap

Description

- Riprap structures are composed of cobble- to boulder-sized blocks of granite, limestone, concrete, or other materials.
- Riprap structures are used as revetment and groins for shoreline protection, and as breakwaters and jetties around inlets and marinas.
- Attached biota are generally sparse on exposed riprap.
- They are common in highly developed waterfront areas.

Predicted Oil Behavior

- Deep penetration of oil between the blocks is likely.
- Oil adheres readily to the rough surfaces of the blocks.
- Uncleaned oil can cause chronic leaching until the oil hardens.

Response Considerations

- When the oil is fresh and liquid, high pressure spraying and/or water flooding may be effective if all liberated oil is recovered.
- Heavy and weathered oils are more difficult to remove, requiring scraping and high-pressure, hot-water flushing.

INTERTIDAL

Riprap

Oil Category Descriptions

I – Gasoline products
II – Diesel-like products and light crudes
III – Medium grade crudes and intermediate products
IV – Heavy crudes and residual products
V – Non-floating oil products

The following categories are used to compare the relative environmental impact of each response method in the specific environment and habitat for each oil type. The codes in each table mean:

A = The least adverse habitat impact.
B = Some adverse habitat impact.
C = Significant adverse habitat impact.
D = The most adverse habitat impact.
I = Insufficient information - impact or effectiveness of the method could not be evaluated.
— = Not applicable.

Response Method	Oil Category I	II	III	IV	V
Natural Recovery	A	A	B	B	B
Barriers/Berms	–	–	–	–	–
Manual Oil Removal/Cleaning	–	A	A	A	A
Mechanical Oil Removal	–	–	B	C	C
Sorbents	–	A	A	B	B
Vacuum	–	–	A	A	A
Debris Removal	–	A	A	A	A
Sediment Reworking/Tilling	–	–	–	–	–
Vegetation Cutting/Removal	–	–	–	–	–
Flooding (deluge)	A	A	B	C	C
Low-pressure, Ambient Water Flushing	A	A	B	C	C
High-pressure, Ambient Water Flushing	A	A	B	B	C
Low-pressure, Hot Water Flushing	–	C	C	C	C
High-pressure, Hot Water Flushing	–	C	C	C	C
Steam Cleaning	–	–	D	D	D
Sand Blasting	–	–	D	D	D
Solidifiers	–	B	B	–	–
Shoreline Cleaning Agents	–	–	B	B	B
Nutrient Enrichment	–	A	A	B	B
Natural Microbe Seeding	–	I	I	I	I
In-situ Burning	–	–	D	D	–

Consult the *Environmental Considerations for Marine Oil Spill Response* document referenced on page 5 before using this table.